


Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference 7510163-SUN | FOR FURTHER ACTION | See Form PCT/IPEA/416 |
| International application No. PCT/CN2005/002257 | International filing date (day/month/year) 20 Dec.2005(20.12.2005) | Priority date (day/month/year) 22 Apr.2005(22.04.2005) |
| International Patent Classification (IPC) or national classification and IPC H01J65/04(2006.01); | | |
| Applicant Li,Jin | | |
| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANN</p> <p>a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>4</u> sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input checked="" type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____ containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> | | |
| <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p> | | |
| Date of submission of the demand 17 Apr.2006 (17.04.2006) | Date of completion of this report 15 Aug.2007(15.08.2007) | |
| Name and mailing address of the IPEA/CN The State Intellectual Property Office, the P.R.China, 6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088 Facsimile No. 86-10-62019451 | Authorized officer  Telephone No. 62083429 | |

Form PCT/IPEA/409 (cover sheet) (April 2007)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/CN2005/002257

Box No. I Basis of the report

1. With regard to the language, this report is based on:

- ☒ the international application in the language in which it was filed
☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of:
☐ international search (Rules 12.3(a) and 23.1(b))
☐ publication of the international application (Rule 12.4(a))
☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☒ the international application as originally filed/furnished
☐ the description: _____ as originally filed/furnished
 pages _____ received by this Authority on _____
 pages _____ received by this Authority on _____
 pages _____
☐ the claims: _____ as originally filed/furnished
 pages _____ as amended (together with any statement) under Article 19
 pages _____ received by this Authority on _____
 pages _____ received by this Authority on _____
 pages _____
☐ the drawings: _____ as originally filed/furnished
 pages _____ received by this Authority on _____
 pages _____ received by this Authority on _____
 pages _____
☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
☐ the claims, Nos. _____
☐ the drawings, sheets/figs _____
☐ the sequence listing (*specify*): _____
☐ any table(s) related to sequence listing (*specify*): _____

4. ☒ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☒ the description, pages 1-3
☒ the claims, Nos. 1-10
☐ the drawings, sheets/figs _____
☐ the sequence listing (*specify*): _____
☐ any table(s) related to sequence listing (*specify*): _____

5. ☐ This report has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91(Rule 70.2(e)).

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement:

| | | |
|-------------------------------|-------------|-----|
| Novelty (N) | Claims 1-9 | YES |
| | Claims none | NO |
| Inventive step (IS) | Claims none | YES |
| | Claims 1-9 | NO |
| Industrial applicability (IA) | Claims 1-9 | YES |
| | Claims none | NO |

2. Citations and explanations (Rule 70.7)

Cited documents: D1: CN1055349C
D2: CN2297797Y

1. Novelty

1) Claim 1: D1 is regarded as being the closest prior art, and does not explicitly or implicitly disclose the following technical features "the cavum lamp body can be aerated/ deaerated". Thus the claim 1 meets the criteria set out in PCT Article 33(2).

2) Claims 2-9 subjected to the claim 1 meet the criteria set out in PCT Article 33(2) as well.

2. Inventive Step

1) Claim 1: D1 (see the description: page 3 line 6- page 7 line 6, figure 1) discloses the following features: a non-filament closed ring type gas discharge lamp 1, wherein a through hole for mounting a ferrite core 2 is set on its closed cavum lamp body and a fluorescent coating is coated inside the cavum lamp body. The only difference between them is that D1 does not disclose the feature "the cavum lamp body can be aerated/ deaerated". However D2 (see the description: page 2 line 18- page 3 line 5, figure 1) discloses the feature "the cavum lamp body 5 includes an aeration/ deaeration pipe 11", which can solve the same problem as that to be solved by the distinguishing feature. It would be obvious for a skilled person to apply the teaching of D2 to D1 and arrive at the subject-matter of claim 1, without exercising an inventive step. Therefore the subject-matter of claim 1 does not involve an inventive step, and does not meet the criteria set out in PCT Article 33(3).

Answering to the opinions stated by the applicant: (一) The skilled person can't directly arrive at the technique effects mentioned in the opinion statement according to the subject-matter of the claim 1; (二) That "the non-filament fluorescence lamp can be made" mentioned in D1 (see the description: page 3 line 4) proves that a fluorescent coating is necessarily coated inside the cavum lamp body; (三) "Deaeration pipe 11" mentioned in D2 is necessarily a pipe that can be aerated and deaerated. Because of the above-mentioned three points, the examiner can't accept the opinions stated by the applicant.

2) Claims 2-4,9: D2 (figure 1) discloses the additional technical features of the dependent claims 2-4,9: a little glass tube 12 and an aeration/ deaeration pipe 11 communicated with the lamp body cavum 5;

Claims 5-8: their additional technical features are respectively simple changes of the number and location of the through hole and the shape of the lamp body, the skilled person can select them in according with conventional knowledge, without the exercise of inventive skill.

Therefore the subject-matter of claims 2-9 do not involve an inventive step, and do not meet the criteria set out in PCT Article 33(3).

3. Industrial Applicability

The invention of claims 1-9 are industrially applicable in the technical field of the lighting equipment and thus meet the requirements of PCT Article 33(4).

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

In the invention, instead of the conventional bulb with filament, the fluorescent power inside the magnetic energy bulb is activated by a magnetic body 4 through a through hole 2 on the lamp body to make the magnetic energy bulb illuminate and light, consequently to solve the technical problem of improvement in service life. But the essential technical feature "the magnetic body 4" for solving the technical problem is not mentioned in the claim 1, so the claim 1 is not complied with PCT Article 6.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of Box No. 1, Item No. 4:

Pages 1-3 in the description and claims 1-10 submitted by the applicant according to PCT Article 34 on 17 Apr. 2006 (17.04.2006) go beyond the disclosure in the international application as filed and fail to meet the requirements of PCT Article 34(2)(b). The detailed reasons are as follows:

1. Claim 1: 1) "magnetic energy generator" is a generic concept not described in the initial international application, it includes the magnet described in the initial description and any other devices that can produce magnetic energy; 2) that "Hg is housed inside the lamp body cavum", for a person skilled in the art, can't be determined unambiguously according to the contents "Hg is housed inside the little glass tube 5" and "the little glass tube 5 extends to the inside of the lamp body cavum" described in the initial description; Therefore the claim 1 goes beyond the disclosure in the international application as filed and fails to meet the requirements of PCT Article 34(2)(b).

2. Claims 2-4: its additional features aren't described in the initial international application, and for a person skilled in the art, can't be determined unambiguously according to the contents described in the initial description. Therefore the claims 2-4 go beyond the disclosure in the international application as filed and fail to meet the requirements of PCT Article 34(2)(b).

3. Claims 5-10 are all the dependent claims subjected to the claim 1. Because the claim 1 goes beyond the disclosure in the international application as filed, claims 5-10 go beyond the disclosure in the international application as filed and fail to meet the requirements of PCT Article 34(2)(b) as well.

4. Besides the above-mentioned, the technique effects "life of the lamp is 16 times longer than that of energy-saving lamp" and "the input power of the lamp can reach 3w~1500w" described in the background art of the description, for a person skilled in the art, can't be determined unambiguously according to the contents "life of the lamp is 16 times longer than that of the fluorescence lamp in the original invention" and "the input power can reach 6w~1500w" described in the initial description. Therefore the description goes beyond the disclosure in the international application as filed and fails to meet the requirements of PCT Article 34(2)(b).